

REMARKS

Claims 50-58 are cancelled. Claims 44-49 are pending in the application.

Claims 44-58 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dennison (U.S. Patent No. 5,292,677), in view of Arima (U.S. Patent No. 5,612,241), and Bronner (U.S. Patent No. 5,508,219). With respect to claims 50-58, without admission as to the propriety of the Examiner's rejection, such claims are cancelled in order to limit the number of issues in the event of appeal.

In accordance with MPEP § 2143, a proper obviousness rejection has the following three requirements: 1) there must be some suggestion or motivation to modify or combine reference teachings; 2) there must be a reasonable expectation of success; and 3) the combined references must teach or suggest all of the claim limitations. Each of these three factors must be shown in order to establish a *prima facie* case of obviousness, the burden of which is upon the Examiner. Claims 44-49 are allowable for at least the reasons that the cited references, considered individually or in combination, fail to disclose or suggest each and every element in any of those claims and fails to provide motivation for combination.

Independent claim 44 recites forming a conductive material over portions of some of conductive lines within a peripheral area, forming openings through an insulative material to expose the conductive material within the peripheral area, forming a storage capacitor electrode layer within the openings. Claim 44 additionally recites entirely removing the storage capacitor electrode layer and at least some of the conductive material received over conductive lines within the peripheral area, outwardly exposing conductive portions of conductive lines within the peripheral area. As acknowledged by the Examiner at page 3 of

the present action, Dennison fails to disclose or suggest the claim 44 recited conductive material received over portions of some of the conductive lines within the peripheral area. The Examiner indicates reliance upon Arima as disclosing conductive material received over portions of conductive lines within the peripheral area referencing Fig. 3C and column 6, lines 52-61 of the Arima disclosure. The Examiner contends that it would be obvious to combine Arima and Dennison “because the conductive plug will provide for better electrical contact to the memory device and peripheral devices” (present action at page 4). The Examiner further contends that since conductive material disclosed by Arima is formed before an inter-dielectric layer is formed, an etching step disclosed by Dennison would include removing the conductive material described by Arima.

Directing attention to the Arima disclosure at Fig. 3C and column 6, lines 52-61 as relied upon by the Examiner, it is noted that the conductive material 16 is specifically retained over the conductive lines. Accordingly, the combination of Arima in view of Dennison, which fails to disclose or suggest conductive material over conductive lines within the peripheral area, does not disclose or suggest the claim 44 recited formation and removal of conductive material over conductive lines in the peripheral area, and therefore does not disclose or suggest each and every element of the claim.

With respect to the motivation element to support a *prima facie* obviousness rejection, the present Action fails to provide any basis of motivation for the relied upon combination other than conclusory statements. The Federal Circuit discussed proper motivation in *In re Lee*, 61 USPQ 2d 1430 (Fed. Cir. 2002). In the Lee case, the Court stated that the factual inquiry whether to combine references must be based on objective evidence of record. Additionally, the Court in *In re Fritch*, 23 USPQ 2d 1780, 1783 (Fed.

Cir. 1992) stated that motivation is provided only by showing some objective teaching in the prior art, or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. The Court in Lee stated that the Examiner's conclusory statements in the Lee case do not adequately address issues of motivation to combine. The Court additionally stated that the factual question of motivation is material to patentability and cannot be resolved on subjective belief and unknown authority. The Court further stated that deficiencies of cited references cannot be remedied by general conclusions about what is basic knowledge or common sense and indicated that the determination of patentability must be based on evidence.

In the instant case the record is entirely devoid of any evidence to support motivation to combine the teachings apart from conclusory statements of the Examiner which are insufficient for proper motivation as set forth by the Federal Circuit. The Examiner indicates that combination would be obvious since a conductive plug will provide better electric contact to memory device and peripheral devices. It is unclear as to how the conductive plug recited in claim 44 can provide "better electric contact to memory device and peripheral devices". Further, the statement set forth by the Examiner regarding providing better electrical contact in no way supports motivation for the recited formation and subsequent removal of conductive material in the peripheral area over the conductive lines. With respect to the combination of Arima and Dennison, the Examiner's contention that the etching step disclosed by Dennison would include removing conductive material described by Arima goes directly against the teaching of Arima which specifically retains such material in final structures disclosed. Accordingly, no basis for motivation is provided by the cited references.

As indicated at page 4 of the present Action, Bronner is relied upon as disclosing particular etch chemistries. However, the etch chemistries disclosed by Bronner does not contribute toward suggesting the claim 44 recited forming and subsequently removing conductive material received over conductive lines within the peripheral area and outwardly exposing conductive portions of conductive lines within the peripheral area. Further, Bronner does not provide motivation for the combination set forth by the Examiner. Accordingly, the combination of Arima, Dennison and Bronner fails to disclose or suggest each and every element recited in claim 44 and fails to provide motivation for combination. A *prima facie* case of obviousness is therefore lacking with respect to claim 44 and such is allowable over the art of record.

Dependent claims 45-49 are allowable over the cited combination of Arima, Dennison and Bronner for at least the reason that they depend from allowable base claim 44.

For the reasons discussed above, pending claims 44-49 are allowable. Accordingly, applicant respectfully requests formal allowance of such claims in the Examiner's next action.

Respectfully submitted,

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